



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JUN 17 2004

DOT-E 12753
(FIRST REVISION)

EXPIRATION DATE: May 31, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Praxair Inc.
Danbury, CT
2. PURPOSE AND LIMITATION:
 - a. This exemption authorizes the transportation in commerce of dichlorosilane in certain DOT specification seamless steel cylinder that have a water capacity exceeding 1000 pounds. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304a(a) in that a DOT specification having a water capacity greater than 1,000 pounds is not authorized, except as specified herein.

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5. BASIS: This exemption is based on the application of Praxair dated June 1, 2004 submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group
Dichlorosilane	2.3	UN2189	N/A, Hazard Zone B

7. SAFETY CONTROL MEASURES:

a. PACKAGING -Prescribed packaging is a DOT Specification 3AX or 3AAX cylinder with a minimum service pressure of 2400 psig. Cylinders are not fitted with pressure relief devices.

(1) The cylinders (tubes) must be mounted to and shipped in an ISO frame.

(2) Manifolding of cylinders is not authorized. Each cylinder must be equipped with an individual shutoff valve that is closed during transit. Valves must meet all requirement of § 173.40.

b. TESTING - Each cylinder must be retested and inspected as specified in § 180.205 for DOT Specifications 3AX and 3AAX cylinders.

c. OPERATIONAL CONTROLS -

(1) Maximum permitted filling density of dichlorosilane is calculated to meet the following conditions:

(i) Maximum permitted filling density is 95 percent. (**Note:** Filling density is defined as the percent ratio of the weight of the gas in a cylinder to the weight of the water that the cylinder will hold at 16°C (60°F).)

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(ii) The pressure in the cylinder may not exceed 95 percent of the cylinders test pressure at 65°C (149°F).

(iii) Maximum tolerance of the scale must be +/- 0.5%.

(iv) Prior to the first shipment, Praxair will take a minimum of one representative cylinder for the purposes of pressure/temperature monitoring test. The representative cylinder must be selected from the cylinder population that are filled and completed for shipment. The representative cylinder must have the same fill density as the rest of the population. The temperature of the gas in each selected cylinder will be uniformly raised while the pressure is being recorded every 5°C or 10°F until the gas temperature has reached 65°C (149°F). The data collected shall be summarized and presented to the OHMEA prior to renewal of the exemption.

(2) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the cylinders are not fitted with pressure relief devices and provide appropriate guidance for exposure to fire.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modification or change is made to the cylinder or its content and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. Each cylinder must be plainly and durably marked "DOT-E 12753" as specified in §§ 172.302(b) and (c).

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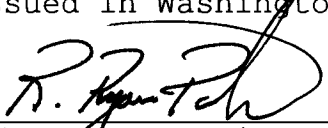
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each motor vehicle used to transport packages covered by this exemption.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:


Robert A. McGuire
fr Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous
Materials Safety, Research and Special Programs Administration,
Department of Transportation, Washington, D.C. 20590.
Attention: DHM-31.

Copies of this exemption may be obtained by accessing the
Hazardous Materials Safety Homepage at
<http://hazmat.dot.gov/exemptions> Photo reproductions and legible
reductions of this exemption are permitted. Any alteration of
this exemption is prohibited.

PO: MMT/AM